

CHARGE NUMBER: 4010
PROJECT TITLE: Cigarette Components and Smoker Studies
PROJECT LEADER: W. A. Geiszler
PERIOD COVERED: August, 1984

I. Mentholated Foil (K. Gunst)

Objective: Determine consumer acceptability of B&H Menthol 100's with menthol applied to the packaging foil.

Status: The third POL test of the menthol-on-foil prototype versus the production control cigarette is in the field and scheduled for completion in September. The cigarettes for the third test were aged six weeks prior to shipment. Cigarettes for the fourth and final test are undergoing smoking analysis.

Plans: Complete consumer testing for B&H 100's. Initiate consumer testing for Merit Ultra Lights KS Menthol.

II. Lark Filter Design (K. Gunst)

Objective: Determine the feasibility of (1) replacing SCCW carbon with MF2C carbon in Lark and Lark Milds and (2) designing a common filter for both Lark and Lark Milds.

Status/Plans: Analytical testing of Lark KS prototypes by TTG has shown no significant differences in particulate or gas phase smoke deliveries between Lark SCCW carbon (coal based, impregnated) and Parliament MF2C carbon (coconut shell based, not impregnated). MF2C carbon could offer both cost and processing advantages. Plans are being made for consumer testing of the two carbons in Lark KS.

A common filter design is being considered for Lark and Lark Milds to avoid changeovers in plug making. Computer modeling has indicated that the 21 mm filter used on Lark KS could be used on Lark Milds KS with reasonable changes in filter ventilation and paper porosity. Similarly, a common 27.5 mm filter looks feasible for the 100 mm products according to computer modeling. Cigarette models will be made to test the feasibility further.

III. Tobacco-like Cigarette Wrapper (K. Gunst)

Objective: Evaluate a tobacco-containing cigarette wrapper from Kimberly-Clark.

Status/Plans: Cigarette models were made with six brown experimental wrappers composed of 51% tobacco material, the balance being softwood fiber and calcium carbonate. The brown wrappers have 28-35 second Greiner porosities and deliver 20% more FTC tar and 50% more CO than a 16 second conventional wrapper. A second set of models designed to deliver 11 mg FTC tar have been made for evaluation.

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IV. White Tipping (K. Gunst)

Objective: Qualify Kimberly-Clark as a supplier for white tipping with >88% opacity and 0% filter flare-up rate.

Status: An 88% opacity tipping basesheet from K-C identified as GSR-236 was printed to Marlboro Lights 100's specifications and evaluated for filter flare-up. The flare-up rates were 0.2% versus 0% for the newly qualified Ecusta 30436 sheet and 6% for the current Marlboro Lights tipping basesheet (GSR-156).

Plans: Conduct machinability and taste testing for the GSR-236 tipping.

V. True Cigarette Design (W. Geiszler, R. Arthur)

Objective: Evaluate the smoking characteristics of the new True cigarette design.

Status: Flavor Panel evaluations of the new True "Flavor Chamber" filter have indicated that the new filter delivers slightly more flavor response than the old design. Since the filter ventilation levels of the old and new True KS designs respond differently to increasing flowrates, both cigarettes were smoked with 50 cc and 75 cc puff volumes on the smoking simulator. The new design gives 5-10% more TPM and one more puff than the old design at the elevated puffing volumes. Both designs deliver 5 mg FTC tar in CI smoking with 35 cc puffs.

Plans: Evaluate a dual filter design with Hauni laser ventilation on Merit Ultra Lights.

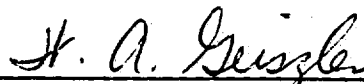
IV. Lip-Release Coatings (R. Arthur)

Objective Improve the lip-release characteristics of white tipped cigarette products.

Status: In a second Cross Complex Panel test, Marlboro Lights tippings converted by Hermetite have been rated poorer than several other white tippings in lip release properties. Samples of tippings prepared by Thiele-Engdahl, the nitrocellulose supplier, with several different formulations were screened internally, with an Ecusta formulation receiving the highest ratings.

Plans: Discuss results with Thiele-Engdahl and Hermetite, and conduct further testing.

WAG/fms



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